

Conclusions and Recommendations

Although outbreaks always represent challenges in investigation and implementation of appropriate control measures, they also provide opportunities for improvement. Over the last few years, there has been marked improvement in outbreak recognition and reporting in West Virginia. However, opportunities still exist for continued improvements and can be highlighted as follows:

1. Outbreaks are immediately notifiable in West Virginia and should be reported to the Bureau for Public Health within 60 minutes. Immediate reporting improves the outbreak response by facilitating laboratory testing for diagnosis, implementing control measures in a timely manner, and preventing further illnesses or deaths. It also facilitates communication with CDC on critical health issues.
2. The role of laboratory testing is crucial in outbreak management. There is a great need for using advanced technology in laboratory testing to improve the early detection and management of outbreaks. Timely collection of specimens facilitates diagnosis and institution of control measures. Coordination and timely communication between epidemiology and laboratory staff is essential in outbreak management and control.
3. The use of standard outbreak protocols has tremendous impact in improving outbreak investigation and control. The Division of Infectious Disease Epidemiology (DIDE) has developed several outbreak toolkits for the most commonly encountered outbreaks, such as influenza, pneumonia, norovirus, and scabies. DIDE will continue to develop new toolkits and protocols to assist partners in outbreak investigation and to maintain its website with up-to-date information. DIDE's web site is www.wvidep.org
4. DIDE continues to improve feedback of information on outbreaks and outbreak investigation during 2011 and beyond. Since January 2011, DIDE has been releasing a monthly report on outbreaks to provide details on reported outbreaks in the state to public health partners and healthcare providers.
5. DIDE is planning to hold an evaluation of foodborne outbreak response at the state and regional levels. This evaluation will assist in identifying areas of strength and opportunities for improvement according to the Council to Improve Foodborne Outbreak Response (CIFOR) guidelines.
6. Foodborne disease outbreaks are not uncommon and can cause serious illness. The timely response to foodborne illness reports is crucial to control outbreaks and identify potential sources. Obtaining laboratory samples is critical to guide the recommendations and allow confirmation of potential common transmission sources.

7. DIDE will continue to participate in electronic reporting of all enteric outbreaks in the National Outbreak Reporting System (NORS).
8. DIDE is committed to provide regular training on outbreak management to the state, regional and local public health personnel.
9. Outbreak surveillance in the last few years indicates that outbreaks in long-term care facilities are increasing and are occasionally severe and even fatal. Identification and management of outbreaks in LTCFs can be challenging for the facility staff, healthcare providers and public health because of the following obstacles:
 - Lack of dedicated Infection Preventionist (IPs) in each facility. IPs usually have multiple responsibilities in addition to infection control.
 - Limited resources for the (IPs) particularly in training and education.
 - Staffing issues, such as rapid turn-over, occasional understaffing, and lack of regular training in infection control.
 - Scarce on-site physician availability.
 - Excessive use of antibiotics
 - Low technology setting, limited diagnostic tools, and scarce resources
 - Low immunization rates especially among staff
 - Challenges in balancing infection control measures and psychosocial needs of the residents.
 - Inconsistent utilization of existing surveillance system
10. In order to improve infection control and outbreak identification, reporting and management in LTCFs. The WV healthcare-associated infections (HAIs) plan for 2011 proposes a LTCFs Working Group as a subcommittee of the state HAIs Advisory Group. The Working Group will initially help maintain communication among stakeholders and assess the infection prevention and control needs of LTCFs. The following strategies will be presented to the LTCFs Working Group for discussion:
 - Establish supporting infrastructures for LTCFs IPs
 - Identify Educational and training needs of LTCFs IPs
 - Educate physicians regarding utilization of antibiotics and infection control in LTCFs
 - Encourage LTCFs to develop and update infection control policies and procedures according to SHEA-APIC recommendations.
 - Provide regular training on infection prevention in LTCFs to the staff at the state, regional and local levels.
11. Although there were no outbreaks reported from ambulatory care centers in 2010, there were 2 major HAI outbreaks reported from ambulatory clinics in 2009. Therefore, DIDE will offer a statewide training on infection prevention for

ambulatory surgery centers (ASC) provided by APIC to ASC staff and public health personnel.

12. The WV 2011 HAIs plan aims to improve identification and management of HAI outbreaks through the following strategies:

- Presenting the findings and recommendations from this report to the Advisory Group as well as WV APIC section as the basis for annual needs assessment.
- Collaborating with representatives of the Office of Health Facility Licensure and Certification, the Board of Medicine, the Board of Osteopathy, the Board of Dental Examiners, Board of Pharmacy, and the Board of Examiners for Registered Professional Nurses to formulate an agreement to coordinate investigation of outbreaks and infection control breaches.
- Provide training for health department staff to investigate outbreaks, clusters or unusual cases of HAIs.
- Planning for revision of the reportable disease rule, during 2012, to include healthcare associated outbreaks in the list of reportable conditions.
- Work with partners including CSTE, CDC, state legislatures, and providers across the healthcare continuum to improve outbreak reporting to state health departments